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November 16, 2022

Director, Division of Enforcement
Department for Environmental Protection
300 Sower Blvd.
Frankfort, KY 40601

Chief, Water Enforcement Branch
Enforcement and Compliance Assurance Division
U.S. Environmental Protection Agency, Region 4
61 Forsyth Street SW
Atlanta, GA 30303

Chief, Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
Post Office Box 7611
Washington DC 20044-7611

Subject: Cinderella PS Elimination
Project Modification
IOAP Project No. S_PO_WC_PC04_M_01_C
Civil Action No. 3:05-cv-236-S
DOJ Case No. 90-5-1-1-08254

Attention Chiefs and Director:

MSD is requesting approval of a proposed minor project modification to the Cinderella PS Elimination project (IOAP Project No. S_PO_WC_PC04_M_01_C). This request is part of the ongoing adaptive management review of the Integrated Overflow Abatement Plan (IOAP), approved May 2021.

2009 IOAP Project Description

The original Cinderella PS Elimination Project consisted of eliminating the pump station by constructing approximately 2,200 LF of 10" sewer. The project completion date was December 31, 2023.

2012 IOAP Modification Project Description

No changes were proposed in the 2012 IOAP Modification (approved in 2014). The project details remained the same as the 2009 project.

2021 IOAP Modification Project Description

No changes were proposed in the 2021 IOAP Modification. The project details remained the same as the 2009 and 2012 projects. The project completion date was changed to December 31, 2025.

2022 Project Modification Request

The project modification request involves changing the completion date to December 31, 2030 in order to allow for the completion of the Admiral Way Pump Station (AWPS) diversion project. This time extension provides the necessary time for easement acquisition and construction of the AWPS diversion project. The diversion project allows for the highest benefit-cost scored alternative for the mitigation of SSOs at the Cinderella PS while preventing downstream capacity issues and making Asset Management related improvements. The project technology remains a pump station elimination, although the alignment of the pump station elimination and discharge location is changed from the 2021 submittal, resulting in approximately 4,450 LF of 10" sewer. The project level of control will remain a 2-year, 3-hour storm event.

Technical Justification

Before MSD initiated the final design of the proposed elimination, additional flow monitoring was performed in the area, and pump drawdown data and runtime data were collected at the existing Cinderella Pump Station. The

additional data was used to update the hydraulic model to reflect current conditions and to provide a more detailed review of the area of the proposed pump station discharge location. Additional modeling performed using the newly calibrated model indicates the pump station elimination still provides the highest benefit-cost score using the same methodologies developed during the creation of the IOAP. However, the solution modeling also indicated potential downstream capacity impacts in the Fishpool Interceptor area that could result in the creation of an overflow if the Cinderella Pump Station were eliminated without any further mitigation.

As part of the 2021 IOAP modification, MSD recognized the need for continued Asset Management improvements, and committed to spending an average of \$25 million dollars annually (\$125M over a five year period) on Asset Management. Concurrent with the Cinderella Pump Station Elimination analysis, as part of the overall Asset Management program, MSD assessed alternatives to address potential capacity and operational issues at the nearby Admiral Way Pump Station (AWPS). The AWPS pump station had reported SSOs upstream of the pump station due to excessive Inflow and Infiltration (I&I) and lack of pump station capacity. Furthermore, AWPS discharges to the Fishpool Interceptor and contributes to the capacity issues in the Fishpool Interceptor. MSD performed system rehabilitation upstream of the pump station, but this did not remove enough I&I to eliminate the SSOs. Additional analysis resulted in the final selected alternative of constructing approximately 23,000 LF of 20" force main from AWPS to the Southern Ditch Interceptor, diverting flow around the Fishpool Interceptor, which alleviates the associated capacity issues. The diversion force main is prioritized in MSD's capital budget, and preliminary design is currently underway. This project will be tracked and reported on in the Annual Report as part of the Asset Management reporting.

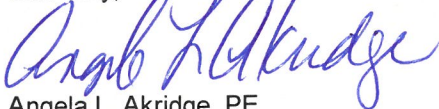
Due to the length of the project and the number of potential easements needed to be acquired for the AWPS force main diversion, construction is not expected to be completed until approximately December 31, 2026. Deferring the schedule of the Cinderella Pump Station elimination until after the AWPS diversion is constructed will allow MSD to proceed with the highest scored alternative for the mitigation of SSOs at Cinderella Pump Station while preventing downstream capacity issues and making Asset Management related improvements. Revising the completion date to December 31, 2030 is recommended in order to comprehensively address system capacity.

For your reference, a copy of the original project fact sheet from the 2021 IOAP Modification can be found in Attachment "A". An updated fact sheet to reflect this project modification is included as Attachment "B".

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 540-6136.

Sincerely,



Angela L. Akridge, PE
Chief Strategy Officer
for Business Transformation and Regulatory Compliance

cc: T. Parrot D. Johnson, PE J. Quarles

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Attachment A: 2021 IOAP Modification Fact Sheet
Attachment B: Updated Fact Sheet

Attachment A



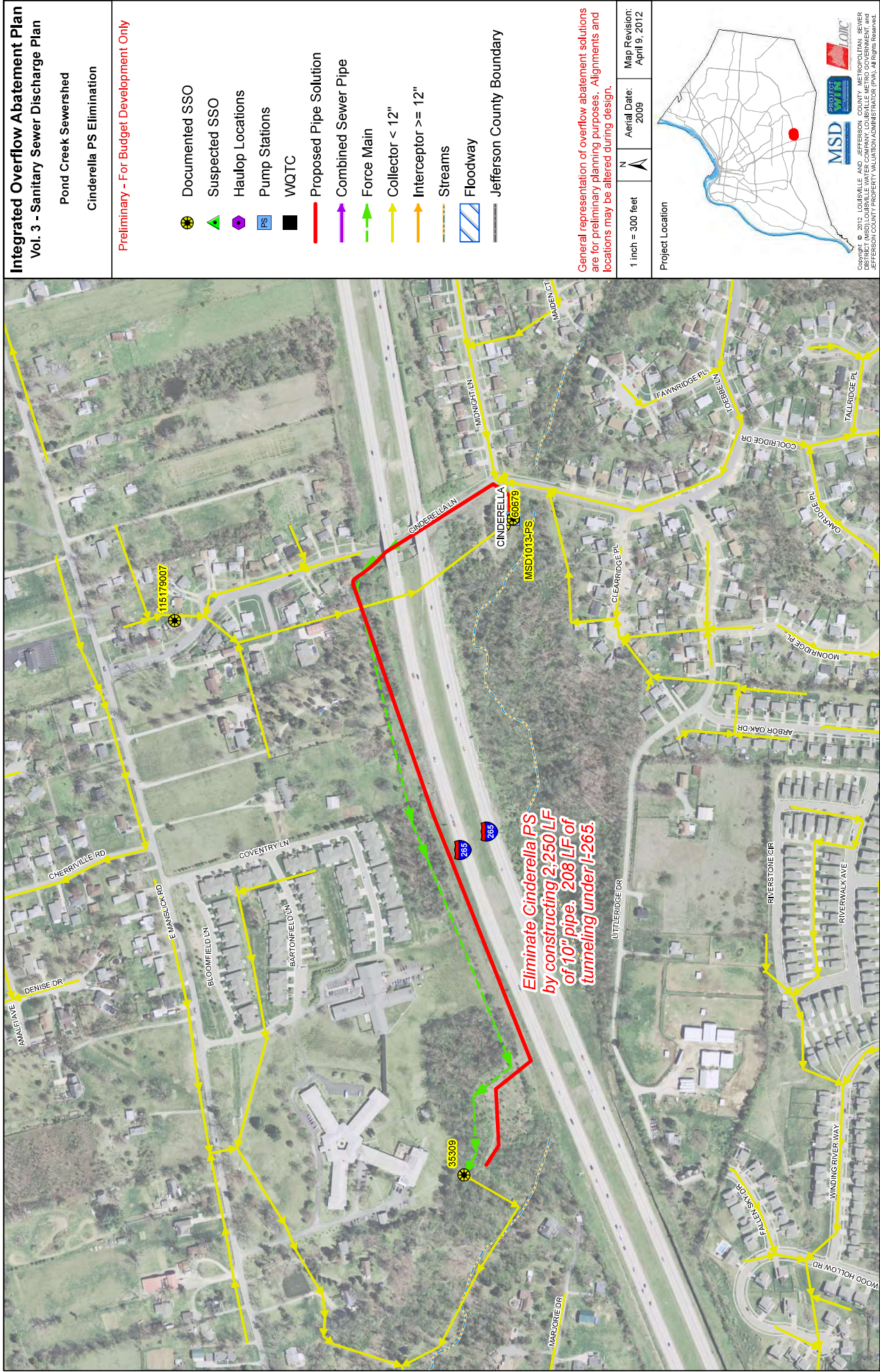
Project Name	Cinderella PS Elimination
Project Number	S_PO_WC_PC04_M_01_C
Modeled Area	Pond Creek
Branch or SSO ID	PC04
Project Type	Diversion
Receiving Stream	Fishpool Creek and Manslick Branch
Project Description	This alternative eliminates Cinderella PS by constructing 2250 LF of 10" pipe. It will require 208 LF of tunneling under I-265.
Reason for Overflow	Pump station and system capacity
Design Parameters	This solution is based on a 1.82 inch cloudburst rain event.
Project Constraints	N/A
Estimated Capital Cost	\$2,205,000
Weighted Benefit/Cost Ratio	43.86

Asset ID	SSO Start Date	Volume (Gal)
60679	1/13/2013	22750
MSD1013-PS	1/22/2006	2500
MSD1013-PS	1/27/2012	4700
35309	10/23/2007	650
35309	10/23/2007	21000
MSD1013-PS	10/6/2013	39750
MSD1013-PS	11/11/2004	16000
MSD1013-PS	11/2/2004	82000
60679	11/28/2011	17750
MSD1013-PS	11/29/2001	100000
60679	12/15/2007	8100
MSD1013-PS	12/17/2001	50000
MSD1013-PS	12/19/2002	15000
60679	12/22/2013	20500
MSD1013-PS	12/31/2002	50000
MSD1013-PS	12/31/2002	50000
60679	12/5/2011	145800
MSD1013-PS	2/22/2003	100000
60679	2/25/2011	83750
60679	2/25/2011	83750
60679	2/28/2011	11125
MSD1013-PS	3/18/2013	4625
MSD1013-PS	3/19/2002	50000
MSD1013-PS	3/19/2008	369000
60679	3/9/2011	38750
60679	4/12/2011	51000
60679	4/23/2011	54825
60679	4/27/2011	81000
MSD1013-PS	4/4/2008	96600

Project Name Cinderella PS Elimination

Project Number S_PO_WC_PC04_M_01_C

60679	5/13/2012	70000
MSD1013-PS	5/15/2008	38600
60679	5/26/2011	13250
60679	5/3/2011	99000
MSD1013-PS	5/30/2004	36000
MSD1013-PS	5/5/2012	10400
MSD1013-PS	8/30/2005	1000
MSD1013-PS	8/4/2009	9999
MSD1013-PS	9/26/2009	3300
MSD1013-PS	9/27/2002	15000



Attachment B

Project Name	Cinderella PS Elimination
Project Number	S_PO_WC_PC04_M_01_C
Modeled Area	Pond Creek
Branch or SSO ID	PC04
Project Type	Diversion
Receiving Stream	Fishpool Creek and Manslick Branch
Project Description	This alternative eliminates Cinderella PS by constructing 4450 LF of 10" pipe. It will require 208 LF of tunneling under I-265.
Reason for Overflow	Pump station and system capacity
Design Parameters	This solution is based on a 1.82 inch cloudburst rain event.
Project Constraints	N/A
Estimated Capital Cost	\$2,205,000
Weighted Benefit/Cost Ratio	43.86

Asset ID	SSO Start Date	Volume (Gal)
35309	10/23/2007	650
35309	10/23/2007	21000
60679	12/22/2013	20500
60679	2/25/2011	83750
60679	5/13/2012	70000
60679	12/5/2011	145800
60679	11/28/2011	17750
60679	5/26/2011	13250
60679	5/3/2011	99000
60679	4/27/2011	81000
60679	4/12/2011	51000
60679	3/9/2011	38750
60679	2/28/2011	11125
60679	1/13/2013	22750
60679	2/25/2011	83750
60679	4/23/2011	54825
60679	12/15/2007	8100
MSD1013-PS	1/27/2012	4700
MSD1013-PS	3/19/2008	369000
MSD1013-PS	5/5/2012	10400
MSD1013-PS	5/30/2004	36000
MSD1013-PS	8/30/2005	1000
MSD1013-PS	12/17/2001	50000
MSD1013-PS	3/19/2002	50000
MSD1013-PS	9/27/2002	15000
MSD1013-PS	12/19/2002	15000
MSD1013-PS	12/31/2002	50000
MSD1013-PS	9/26/2009	3300
MSD1013-PS	2/22/2003	100000

Project Name Cinderella PS Elimination**Project Number** S_PO_WC_PC04_M_01_C

MSD1013-PS	3/18/2013	4625
MSD1013-PS	11/29/2001	100000
MSD1013-PS	11/11/2004	16000
MSD1013-PS	4/4/2008	96600
MSD1013-PS	1/22/2006	2500
MSD1013-PS	8/4/2009	9999
MSD1013-PS	5/15/2008	38600
MSD1013-PS	12/31/2002	50000
MSD1013-PS	11/2/2004	82000
MSD1013-PS	10/6/2013	39750

Integrated Overflow Abatement Plan
Vol 3 Sanitary Sewer Discharge Plan


Pond Creek Sewershed

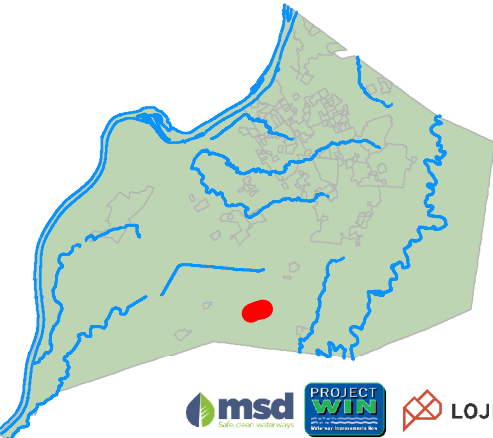
Cinderella PS Elimination

Preliminary - For Budget Development Only

- Documented SSO
- Suspected SSO
- Pump Stations
- Haulop Locations
- Proposed Pipe Solution
- Combined Sewer Pipe
- Force Main
- Collector < 12"
- Interceptor >= 12"
- Drainage Mains
- Streams
- Floodway
- Small WWTP Service Area
- Large WWTP Service Area
- Jefferson County Boundary

General representation of overflow abatement solutions are for preliminary planning purposes. Alignments and locations may be altered during design.

1 inch = 400 feet		Aerial Date: 2021	Map Revision: Sep 30, 2022
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